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AUTHOR	Broschart, James R.
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ABSTRACT

This synthesis of selected manuscripts, submitted to the Bureau of Occupational and Adult Education to aid in developing position statements that reflected the Bureau's view of chief issues surrounding the concept of lifelong learning, presents an overview of adult education in the United States. The first section is a brief listing of the public policy issues regarding the development of a lifelong learning concept. The remainder of this booklet presents information relative to the following three broad areas of investigation: (1) The Adult Learner covers learning definitions, learning theories, adult education, adult learners and educators (includes institutional delivery and self-initiated learning), learning performance, and life stages; (2) The Context for Learning discusses barriers to adult learning (institutional, personal, social, and conceptual barriers), demographics for the year 2000, and some central issues; and (3) Lifelong Learning: A Conceptual Frame examines the common themes found in the manuscripts regarding the concept of lifelong learning. (EM)

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LIFELONG LEARNING IN THE NATION'S THIRD CENTURY

A SYNTHESIS OF SELECTED MANUSCRIPTS ABOUT THE EDUCATION OF ADULTS IN THE UNITED STATES

by

James R. Broschart

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Joseph A. Califano, Jr., *Secretary*
Mary F. Berry, *Assistant Secretary for Education*

Office of Education
Ernest L. Boyer, *Commissioner*

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Foreword

Lifelong learning is a fact. Learning is an activity that is going on every day throughout the life of every American. When we try to do something about it chances are we might hinder rather than help, unless we think through very carefully what our ultimate objectives are when we deal with such a concept.

Lifelong learning is a lot like walking. Almost everyone does it, to some degree of success. Most of us find out about walking during infancy, and from the first hesitant steps proceed to develop our abilities to a high degree of skill throughout our youth and young adulthood. Just as we begin to think we have mastered the art of walking, our bodies send us new signals. We grow old, we slow down, and we discover that we keep on changing physically. Thus, we continue the learning experiences related to walking throughout our lives.

Isn't this what we mean by lifelong learning? No one ever stops learning. We may slow down, stumble, or need to sit and rest from time to time, but we continue to discover learning needs all along. It is a natural undertaking, as difficult to ignore as the desire to keep on walking.

It *is* possible to prevent people from walking—we all recognize that. We can build steps too high to climb, make slopes too steep to go down, and we can build walls and barriers too extensive to walk around. We tend not to make too many mistakes like this because we like to think such things through before we construct them. We lay a sidewalk with line and level because we recognize that we are going to put it there in order to provide service and support and an easier way to get from one place to another.

Perhaps this is playing the analogy out too long, but we should consider it seriously when we discuss lifelong learning. We must think more carefully about the routes we build and the barriers we erect to learning. Like walking, lifelong learning is something we

really cannot "do something about" until we get our line and level and think through what it is we are going to build.

What we must be concerned with is making sure that everyone—every individual in our society—has the opportunity to engage in learning throughout the lifespan. We need to recognize that although learning is something all of us do, it is not something all of us do equally well or with equal opportunity. Here is where public policy issues arise and questions need answering.

Access to learning over the lifespan is a growing concern and a real one. We have intuitively recognized the fact of lifelong learning all along, but it is only now that this concept is generating a significant public conversation. We need to find out what the policy implications of that conversation might be. The Bureau of Occupational and Adult Education (BOAE), in the U.S. Office of Education, has been concerned for several years now that, on the Federal level at least, our thinking and talking about the concept of lifelong learning, the possible programs which might flow from such a concept, and the ways in which we might implement those programs should be a conversation that is focused and explicit. This publication is an outcome of that concern.

In 1975, we brought together a group of advisers, representative of a wide array of interests and backgrounds in our society, to assist this Bureau in its attempt to focus on the issues, policies, and possible programs for providing lifelong learning opportunities for Americans. One result of the meetings was encouragement for the Bureau to ask a number of recognized experts to provide information and background describing the state-of-the-art of education, particularly adult education, in this country. These manuscripts and studies were received in the fall of 1975 and represented a vast and impressive amount of information.

Such a large body of material required synthesis so that it could be useful to the progress of our ongoing conversation about lifelong learning. James Broschart, a fellow from the Institute for Educational Leadership detailed to the BOAE's Division of Adult Education, undertook this task.

We are very pleased to have an opportunity to share this work with a more general audience. Until now our own discussion has been largely an "in-house" affair. We feel it is time to solicit reactions and invite comments from educators, policymakers, and learners throughout the society. Lifelong learning is a public concern, and it deserves a widespread public forum.

William F. Pierce
Deputy Commissioner
Bureau of Occupational and Adult Education

July 1976

Preface

This publication presents an overview of adult education in the United States, based on information from a variety of expert sources. The Bureau of Occupational and Adult Education (BOAE) requested a set of study documents to aid in developing position statements that reflected the Bureau's view of the chief issues surrounding the concept of lifelong learning. This presentation also gives the BOAE an opportunity to express its concerns about public policy issues and their implications for adult learning.

This synthesis is an attempt to draw together the content of these study documents. It is *not* a draft position paper for the Bureau. Rather, the intent is to provide a manageable and accurate portrayal of the massive set of study materials. These documents, over a thousand pages, addressed—in detail and in depth—the following broad topics.

I. An overview of the state of adult learning in the United States today
II. Evaluation of the benefits of adult learning.
III. Projections of, with estimates for, future needs of American society and the implications for adult learning.
IV. Assessments of the major problems confronting today's adult learners.

We have undertaken to report on the total array of documents requested by the Bureau to examine the aforementioned topics. To support this discussion we have extrapolated from the manuscripts and included a topical outline of the "State of the Art" of adult learning today as the appendix.

We have drawn on all the materials for information relevant to three broad areas of investigation. (1) The Adult Learner, (2) The Context for Learning, and (3) Lifelong Learning. A Conceptual Frame.

To accomplish this, we mixed and matched information from the documents and extracted statements from the work of their various writers. Inevitably, the intended use of each study's original context has been impaired by this approach. The purpose was to pull together information from these various and broad sources into a somewhat abbreviated format. Also, the intent was to abstract from the documents those pieces of information which might elicit wide response. Since the audience for this essay is a group of professionals whose reactions are sought because we share a common concern for the concept of lifelong learning, it is hoped that our responses will, in turn, provide an additional source for assessment and analysis of future public policy for lifelong learning.

One outcome of this effort to synthesize such diverse information should be noted. It is that few experts whose work was requested agree on certain basic usages, including the definition of key terms for this discussion. Many of the writers differ over the conceptual base for the field of adult education. Some of the writers also use the term "lifelong learning" and address the concepts underlying such a phrase; again, they differ and often disagree about the meaning to be ascribed to this term and to this area of professional concern.

The chief caution to be considered, based on this examination of the study documents, is that future developments will be difficult if present disagreements among the experts persist. The road ahead for adult education and for the emerging concept of lifelong learning is still unmapped; it would seem that a necessary first step along that road would be to develop generally acceptable common terms that would enable us to work toward constructing a conceptual frame within which both adult education and lifelong learning can relate.

Contents

I. The Public Policy Issues

What are the public policy concerns for the development of a concept of lifelong learning?

- In itself, a first-order concern for policymakers is whether it is in the public interest to conceptualize around a term such as "Lifelong learning" at all. What are the implications in respect to already existing public policies for education and learning?
- Can a concept of lifelong learning lead to programs which will help resolve national problems? If so, which problems and to what extent? Just as important, what problems are not likely to be susceptible to solution by these means?
- Is it more important to address other public issues and problems at this time?
- What is the responsibility and or role of government at all levels, both in supporting a concept of lifelong learning and in implementing this concept through program development and delivery?
- Who is the client who would benefit from lifelong learning? What are the client's wants and needs? Are these determined by individuals, by social groups, by experts, or by officials?
- What programs and policies, both new and already developed, would best implement a concept of lifelong learning?
- What delivery systems are most appropriate to support those programs?
- How can access by the individual to opportunities for lifelong learning be developed, or controlled, or assured? What is the relationship among access to formal, nonformal, and informal education and learning?
- What is the role of government, educational establishments and agencies, and other institutions at national, State, and local levels in both program development and delivery service?
- What is the role of sectors as business, industry, labor, media, and other private enterprise?
- How can programs that implement concepts of lifelong learning be financed? What are the issues and implications for funding strategies—e.g., individual entitlements and the like?

- Should program development for lifelong learning be concerned with such issues as the transitions from youth to the successive stages of adulthood and old age? The relationships among generations? Between family and community life? Life and work? Work and education?
- To what extent, if any, should accreditation, certification, evaluation, and reciprocity be policy issues for lifelong learning? At what level(s) should they arise?
- How should the interests of both "consumers" and "providers" be protected? What are these interests?
- What are the *special* needs of minorities and the disadvantaged? Should these be met by special programs and policies?
- Is there a way of constructing a concept of lifelong learning—and conceiving programs to implement it—that serves the *total* population of the Nation?

This list of policy issues is admittedly the tip of the iceberg. What lies beneath the surface?

II. The Adult Learner

At the outset let us distinguish the *adult* as a person who is over the age of 16 and is likely to have social roles and responsibilities different from youth or children. If the adult is not enrolled formally as a full-time student in an educational institution this individual typically has multiple pursuits involving work, family, community, and individual interests. Thus, adults have economic, domestic, and citizenship requirements which claim their time and attention.

These two aspects—time and attention—are crucial when we add the dimension of learning to an adult's general responsibilities. We thereby generate specific and significant new conditions for learning which differ from those of children and youth. These new conditions are not only a function of the availability of time and attention, they are also a result of the self-view which an adult holds.

The characteristics of the adult learner, generally speaking, can be grouped into four categories (after Brunner, 1959). They furnish us with a general view of the adult as a learning individual:

(1) The *self-concept* of an adult as an individual has shifted from a dependent toward a self-directed view. Hence, according to Brunner, learning situations work best for an adult when there is a mutual teacher-learner responsibility for evaluation of educational needs, setting goals, formulating objectives, and evaluating successes.

(2) Since the adult has a reservoir of *life experiences*, new learning should use methods and techniques for building on these experiences. Therefore, a shift away from traditional transmittal techniques—lecture, assigned reading, and the like—is called for; instead, action-learning techniques of case method, critical incident processing, discussion, simulations, and projects are apt to be more fruitful to the adult learner.

(3) An adult's *readiness to learn* is almost always coincident with his immediate developmental task in respect to role and responsibilities, as compared to the younger learner's inclina-

tion to relate learning to self-development and the discovery of personal identity.

(4) Consequently, the *orientation to learning* differs with the adult in that his desire to learn is directly related to immediate application. There is a present orientation rather than the more youthful orientation toward the future. This implies that a shift from a subject-centered focus to a problem-centered viewpoint is appropriate for the adult. Life problems take a precedence over learning patterns involving logical subject development.

(From Brunner, ibid.)

However much these tenets are open to investigation and debate, the learning theory and educational methodology which has been developed on the basis of these perceived characteristics of the learning adult has been given the name *andragogy* to distinguish this body of theory from more traditional pedagogy. European investigators, particularly in Yugoslavia, Germany, and the Scandinavian countries, have been largely responsible for articulating the emerging concept of andragogy in research and literature generated over the past half-century (Knowles, 1969).

It is valuable to examine these andragogical requirements and measure them against the primary tenets of the two dominant learning theories and educational methodologies in contemporary education, humanism and behaviorism. Even though conceptualization around the field of andragogy has not yet gained widespread acceptance in this country, some American research tends to support the preceding analysis by providing us with revealing data on the characteristics of the adult learner in respect to both humanistic and behavioristic practices (c.f. Bortner, et al, 1974).

SOME DEFINITIONS OF LEARNING

Learning can be understood to signify in its broadest sense as—

> . . . the process by which an activity originates or is changed through reacting to an encountered situation, provided that the change cannot be explained on the basis of reflexes, instincts, maturation, or temporary states of the organism such as fatigue or drugs. . .

(Hilgard, 1956)

This broad universe of activities which initiate and support change in the organism exclusive of growth (where behavior matures through stages irrespective of intervening practice) might be usefully diagramed in the chart on page 5

Referring to the categories described in the "human learning" chart, we can further distinguish deliberate learning from random learning. Alan Tough (1973) can describe learning slightly more narrowly than Hilgard by referring to deliberate "projects"

A Random Learning				
B Family & Socially Directed Learning	C Education			D Self-Directed Learning
	C_1 Compulsory & Formal Post Secondary Schooling	Adult Education		
		C_2 Formal Schooling for Credit	C_3 Nonformal Delivery Systems	
A Random Learning				

* Adapted from the International Standard Classification of Education (ISCED) handbook, 1975.

> A learning project is simply a major, highly deliberate effort to gain certain knowledge and skill (or to change in some other way). Some learning projects are efforts to gain new knowledge, insight, or understanding. Others are attempts to improve one's skill or performance, or to change one's attitudes or emotional reactions.

Thus, Tough's universe of learning excludes category A, "Random Learning," while retaining all other subsets of the learning universe.

Roger DeCrow (1975) establishes a broad premise which cuts the Tough universe into two parts. It is that *most* learning accumulates from our daily experiences mediated through personal interactions with family and friends in local contexts (category B); however, *many* important learning needs require methods with structural learning experiences, some form of instruction, and a conscious planning for continuity. Structure, planning, and purpose may be self-developed by the individual (category D) or offered and delivered by some form of institutional system (C categories C_1, C_2, C_3).

In this latter set, Stanley Moses (1975) is concerned with separating the educational "Core," or those formal primary, secondary, and postsecondary educational institutions (subcategories C_1 and C_2) which are based upon accreditation and cumulative credentialing, from the educational "Periphery" which includes those institutionally delivered educational services that have little or no requirements for access based upon prior achievement or credentials (subcategory C_3). For Moses, the continuum of Core education is either sequential (C_1) or it is recurrent (C_2), but in either case it leads to some form of recognition based on cumulation of educational experiences (certifications and degrees). Peripheral education is not cumulative and does not lead to recognized forms of credentials.

We can readily see as we move through these definitions, and compare them against the chart, that the emphasis both implicitly and explicitly has shifted toward institutions and away from individuals, from learning toward schooling. In recent decades we have come to think of education, especially in the mode of schooling, as wholly representative of legitimate learning. Categories C_1, C_2, and

C_3 have come to represent, for many of us, the understood universe of learning.

Warren Ziegler (1975) reminds us that there is an absence in most of our discussions of any clear distinction between learning and education. Since, as he observes, we are charged with aiding in the formulation of a concept of lifelong learning and not one of lifelong education, we should seek to be careful in preserving this crucial distinction. Hopefully, the schematic which we have utilized will aid us

Accounting for self-directed learning (category D), family and socially directed learning (B), and perhaps even aspects of random learning (A) may become a necessary element of our considerations of policies in support of learning which is to be lifelong. For example, if we confine ourselves to discussing the delivery systems necessary to service the learning activities described by Moses in his Core/Periphery (C_1, C_2, C_3) we can talk usefully about feasible ways to bring instructional materials and providing agents together with learners in some identified setting. However, if our concern shifts from education to learning we may also shift the focus of our discussion and concentrate instead, say, upon ways in which we might make the conditions of life such that learning experiences are facilitated and impediments to learning are removed. This form of discussion may not involve the delivery of anything at all except "elbow-room" and a guarantee of milieu.

Thus, it becomes highly significant to take up as a first-order question: What are we talking about when we initiate a conversation around the term "lifelong learning?" Then, how much of the universe of learning is it necessary for us to consider?

One tactic might be to enlarge the scope of the concept of "education" to include other sectors beyond the present ones—say into the realms of self-directed, family, and socially directed learning. This would *extend* institutional control, and would enable us to exert that corollary to control accountability. In fact, we can detect movement in this direction already, with such devices as the creation of recognition of life experiences through assessment for credit. In this present era, such a broadening of oversight and purview is both attractive and legitimate.

On the other hand, we might argue the alternative tactic: considering the legitimacy of learning as a spontaneous undertaking which has its own internal mechanisms for achieving balance and setting levels of fulfillment. This would mean *contracting* the educational establishment—getting "out of the way" of learning. We see contemporary advocates of a deschooled society present both reasoned and impassioned arguments for this outcome, ranging all the way from burning down the schoolhouses to dismantling them carefully enough to save the bricks.

Or, we might simply recognize that education is something other than learning, and that the former is a subset of a larger universe. We might go a step beyond this and recognize the legitimacy of learning and speculate about ways to give it a status equivalent to that traditionally accorded education, especially schooling.

This third option is one which we might look at hard and thoughtfully, because it may be the one with the most immediate positive impact. The formulation of public policy at the national level, which recognizes learning as a worthwhile undertaking throughout the lifespan, is clearly necessary. The trick is how to develop the support for this undertaking that will neither destroy America's present system of education nor create a new, larger system of coerced learning as a prerequisite for full participation in work and community.

THEORIES OF LEARNING

Learning theory and research is a rich, complex field and we can readily recognize that it is one caught up in change and revision as new investigations proceed. It can be touched upon only briefly here. The level of our interest is, at best, an acknowledgment that this field of endeavor is a basic and necessary part of our conversation and requires serious consideration if our attention is to be drawn to learning as it occurs over the lifespan. As we know, there are two essentially broad areas of speculation about human learning which today have widespread currency: Humanism and Behaviorism.

Humanistic theories of learning develop around a central concept of the individual who is in control of his own learning behavior. The theorists who speak to this view specify internal controls as primary over external influences such as environment, schooling and teaching situations, or the social milieu (c.f. Combs, 1974; Silberman, et al, 1972; Maslow, 1962, 1970). Piaget's schema, wherein every piece of "new" knowledge is required to fit into the developing individual's already established organization of prior knowledge also tends to support such a view (c.f. J.M. Hunt, 1961). A learning theory of this sort also illuminates certain models of "good teaching" which may lead to effective learning for adults. The good teacher is sensitive to the learner, and is supportive and positive in developing enthusiasm for learning (Rosenshine and Furst, 1972).

To be successful as a learning theory, humanism appears to depend on its recognition of the status and needs of the individual who chooses to learn. It evokes learning by capitalizing upon inner desires to gain information or to change behaviors (Rogers, 1969). It is a view which stipulates that learning is, for the most part, an individually initiated activity, in respect to children and youth it depends upon personal readiness and acceptance, and in the adult it depends upon the added dimension of the acceptance by the individual of a

large measure of responsibility. Thus, the humanistic theory seems particularly responsive to a concept of adulthood recognized by our culture wherein the individual is held responsible for his own actions.

The contemporary investigators who have developed and speak on behalf of a *behavioristic theory* of learning base this view on a conception of man operated upon by his environment—especially those external events and encounters which reinforce behavioral outcomes. Thus, the primary control of learning is always vested outside the learner. A great deal of research has been going on for decades to develop and substantiate this position (Bandura, 1969). Much of this evidence is based upon laboratory investigations, and large-scale attempts to apply behaviorially derived operant-learning techniques to either children or adults in the general population have not been fully achieved (although, see Barker, 1968).

Despite B.F Skinner and his followers, who claim 100 percent applicability (Skinner 1968, 1971), other equally prestigious theorists, such as Piaget, remark that behavioristic theories do not deal with man as an intellectual and intelligent being. Behaviorism has led to techniques, however, which have successful applications to adult learning, especially in the realm of self-paced programed instruction where the learner becomes more than a passive recipient of information (Cavanagh and Jones, 1968). It has been shown that fast and efficient learning can take place when the learner deals with discrete units of information within a carefully controlled learning environment (Ferster, 1968). The basic principles of operant-learning techniques, derived from behavioristic theory, are: (1) precise identification of instructional objectives; (2) self-paced learning; (3) immediate feedback or reinforcement contingent upon learning; (4) positive reinforcement rather than negative; and (5) sequencing of presentation, typically in stages or modules, with feedback following each step (Buckley and Walker, 1970).

Much current practice has developed out of these basic but broad conceptualizations about human learning. Two such models for learning offer much for us to consider.

One of these is that learning consists of *information processing*. This model conceives of the individual as a complex system for perceiving and then processing information (Ausubel, 1968). Within such a conceptual stance there are variant models ranging from basic input-output levels of retrieval; then gathering, organizing, structuring, and selective retrieving, all the way to very complicated system constructs which use "rational," "mathematical," and "logical" as descriptors of the individual as a learner. Control of learning in these constructs is both within and without: external information must be made accessible, and individual internal mechanisms must be willing and able to gather and process it. This view is significantly different

from the strict behavioristic view: the internal control of the individual is instrumental in modifying the externally delivered information. The learner, in effect, recycles the information he has already stored in modified forms and may in fact add to it or revise it, depending upon his own expectations (Festinger, Caren, and Rivers, 1970).

The computer analogy is tempting and is frequently used. Man is the best sort of computer in that he possesses the abilities for decisionmaking. He can and does process information into hypotheses, concepts, strategies, and then initiates actions (behaviors) based on this processing ability.

The basic tenets of the information processing models involve (1) prior learning factors, such as the learner's body of previously acquired knowledge, his attitude, his sets of biases, and the processing instructions or understandings regarding the new information, (2) events that occur during learning, such as the way the material is presented and the way the individual relates his new information to previous knowledge; and (3) the cognitive organization/reorganization of information as it is stored, the recall process and events surrounding such retrievals, and the perceived uses of the information (DiVesta, 1974).

Consequently, the adult learner, with his greater volume of information accumulated over a longer lifespan, is thought to be apt to develop complex constellations of knowledge and "know-how" to which new information is then added (D O. Hebb, n d.). Information processing models thus imply that the older learner has a much different learning response than does the youngster. An adult must be concerned with "making sense" in relating new information to the great amount he already knows This means that a large part of the adult learning task is seeking the relevance, or the right relationship, of new input to previous experience. This is both positive in value—the adult learner rarely meets information that is totally new and cannot somehow be related—and negative The negative aspect is that as one grows older, and his body of information grows, there is a likelihood that the cumulated information becomes highly structured, codified, and resists change. The adult, unlike the child, is likely to reject information discrepancies and contradictions to his own previously processed "sets" of knowledge (DiVesta, ibidem).

Another important issue in adult learning, which is partially addressed by information processing models, is that of memory deficits. A processing model invokes a possibility that such deficits in adults is a function of an impaired retrieval ability rather than faulty storage or memory This would signify that learning modes for adults should include instruction regarding retrieval patterns and planning. The possibility for breaking learning down into such components as storage, memory, and retrieval is beguiling for investiga-

tors; however, this entire area of research into memory and recall is still in such flux that conflicting outcomes from a variety of current investigations prevent generalization (c.f. Lumsden and Sherron, 1975).

An *expectancy model* is another recent development in learning theory investigation. It speaks about the learner rather than about the act of learning by stipulating that if an individual is brought together with a new experience or a new bit of information, learning will necessarily take place. This view, then, attends to describing the ways in which learning can be most easily facilitated and least hindered by interferences. Essentially, the concept of expectancy deals with characterizing motivation. It posits a relationship between decisionmaking—or choice—and motivation by indicating that the effort which a learner expends is a function of the choice he makes among alternatives (Dachler and Mobley, 1973). The level of learning effort, and the degree of learning achievement, relates to the extent of motivation, the vigor and persistence of the learner's actions, and his expectancy for success.

The process of learning is not questioned: it goes on. It is the extent of success that bears scrutiny. The expectancy model focuses on motivation because it is primarily concerned with explaining and predicting the results of learning. It is offered as an instrument for accounting for voluntary human behavior, and bases this on an inspection of preferences for outcomes. It then attempts to relate outcome choices to behavioral changes. Thus, expectancy advocates assume individual abilities to anticipate; that is, the learner expects certain outcomes from his behavior, and chooses those outcomes which, to him, are most desirable.

In a broad sense, this sort of learning activity is based on fulfilling one's own prophecies. Simply stated, people learn certain things when and if that learning is deemed desirable and thus becomes an object of choice (S.S. Dubin and M. Okun, 1973).

The very fact that we have here a multiplicity of ways to account for human learning is surely significant. No one theory or construct from that theory can do the whole job of describing the complexity of the learning behavior of humans.

We might like to speculate about the possibility for fashioning an "eclectic model" from these various positions, by taking those bits and pieces which seem to work and fitting them together (c.f. Torbert, 1972). This does not seem to be altogether possible on a theoretical level, since each of these major schema for learning has inherent to it some elements which are incompatible and contradictory to the other. However, on a practical level, we might be well advised to examine "what works" regardless of its theoretical derivation.

Learning undertakings at all ages and levels are practices, not possibilities: We as learners tend to resort to those strategies which do

work—given particular situations, particular needs, and particular learning objectives (c.f. Hickey and Spinetta, 1974; Guttentag, 1973).

ADULT EDUCATION

Having invoked the views of various professionals concerning some descriptions of learning characteristics especially as they are applied to adults, we find that we will need to match this cluster of characteristics against the aims of educators of adults.

Education itself is a slippery term. Derived from the Latin transitive verb *educare,* "to rear," the dictionary tells us that education is "(1) . . . systematic development or training of the mind, capabilities, or character through instruction or study. (2) The acquisition of knowledge or skills, especially formal schooling in an institution of learning. (3) Knowledge, skills, or cultivation acquired through instruction or study." This dictionary (Funk & Wagnalls, 1968) further distinguishes education as follows:

> *Education* is the development and cultivation of the innate powers of the mind; *instruction,* the giving of information and guidance. *Education* may be gained by one's own efforts, but *instruction* is always imparted by another. . .

Thus we see that education, so long as it is systematic development, may occur through instruction or through study.

However, the 1975 handbook "International Standard Classification of Education" (ISCED) develops *its* definition of education upon the notions of organization and purposefulness while using "instruction" as a synonym:

> Education is organized and sustained instruction designed to communicate a combination of knowledge, skills, and understanding valuable for all the activities of life.

We are thereby caught between two views. one which allows for an individual autonomy and self-initiation of systematic study, and one which invokes an external system with a provider of instruction.

If we pursue the more generally available usages of *adult* education we find that the same conflict continues to arise. Here are a representative set of definitions of adult education which have wide currency in the literature of the field.

Internationally, the ISCED, statement on adult education is predictably derivative from its previously cited usage of the term "education." An external providing system is implied "*Adult education* is synonymous with 'out-of-school education' and means organized programs of education provided for the benefit of and adapted to the needs of persons not in the regular school and university system and generally fifteen or over" (ISCED, 1975).

DeCrow (1975), in addressing the conventional definition of adult education as it is used in this country, concurs in stipulating an organization external to the learner:

> . . . (adult education) requires meaningful learning as opposed to simple information, sequential in nature, i.e., building from one step to the next, and therefore, extending over some period of time and involving, in one form or another, purposeful assistance from some teacher or provider.

The Education Committee of the Organization for Economic Cooperation and Development (OECD) expands on this version of adult education in its statement entitled "Learning Opportunities for Adults: Framework for a Comprehensive Policy for Adult Education" (OECD, ED(75)10):

> 'Adult education refers to any activity or programme deliberately designed by a providing agent to satisfy any learning need that may be experienced at any stage in his life by a person who is over the normal school-leaving age and no longer a full-time student. Its ambit spans non-vocational, vocational, general, formal, non-formal, and community education and it is not restricted to any academic level.

With the exception of its insistence upon a providing agent external to the learner this is a most generous definition of the scope of adult education. It is explicit in its responsiveness to any need at any level throughout the lifespan. In this attempt at such a comprehensive definition it is interesting to note a requirement to envelop the areas of "nonvocational, vocational, general, formal, nonformal, and community" education. We are struck by the great array of terms used to denote the various aspects of the adult educational undertaking in its organizational formulations. The Department of Education and Science of England and Wales remarks on this situation and reminds us of even more such territorial descriptions:

> In the stage beyond the school, the expressions "further", "advanced", "higher", "adult", "tertiary", and "recurrent" education are common currency but by no means self-explanatory.
>
> (As cited, 1972.)

Furthermore, in Japan the term "adult education" itself is very seldom used; instead the term "Social Education" applies to every type of learning activity outside of formal education (UNESCO, 1975).

The U.S. Office of Education has lately invoked still another term to deal with still another aspect of adult education:

> *Career* education is the totality of experiences through which one learns about and prepares to engage in work as part of her or his way of living.

This appears as a policy statement, endorsed by the National Advisory Council for Career Education (NACCE) in its "Interim Report" for 1975.

This interation of labels for various sectors of the adult education enterprise does not begin to exhaust the available terms. The ways in which organized education for adults has been divided, subdivided, and redivided again creates not only confusion but serious conflicts in our attempt to clarify the meanings of these terms and their implications for both adult education and adult learning.

We are seized by a need to retreat to a more generalized and open viewpoint. Fortunately one is available:

> Adult education is a process whereby persons who no longer attend school on a regular and full-time basis (unless full-time programs are especially designed for adults) undertake sequential and organized activities with the conscious intention of bringing about changes in information, knowledge, understanding or skills, appreciation and attitudes; or for the purpose of identifying and solving personal or community problems.
>
> (Liveright & Haygood, 1969)

Here, finally, is a definition of adult education which attends to the individual rather than to some organizational scheme. No external control or providing agent is required, although the use of such agencies is certainly possible within the broad frame of this definition.

It also becomes possible, within this definition's scope, to begin to aspire to an earlier stated aim: that of matching the cluster of identified adult learning characteristics with some statement of the objectives of adult education. The adoption, or adaption, of such a viewpoint as this one offered by Liveright and Haygood would go far in permitting us to move toward the development of a conceptual frame for lifelong learning.

ADULT LEARNERS AND ADULT EDUCATORS

It is useful to review the characteristics of adult learners by examining them within the scope of our developing view of adult education. We can measure this "fit" against our generalizations from the major learning theories, in order to derive a sense of what alternatives for learning might be available to the adult.

On the face of it, the adult learner is characterized as a responsible and responsive member of society and as equally responsible and responsive when engaged in any educational transaction. Thus, an adult might be very responsive to humanistic methods. We are told that the adult is nondependent and self-directed; hence, a learner-centered milieu with freedom for the learner to engage in negotiation and transaction with a teacher would seem plausible. There is also strong evidence that the discovery method works well with adults, based on such practices as simulations, projects, and case-method analysis. Adult learners are willing to accept responsibility for much of their accomplishments, in a large degree they might

view the teacher as a facilitator, although they would probably require a strong assurance of the teacher's degree of skilled preparation. Additionally, adult learners would respond to variety rather than to repetition.

On the other hand, the same adults exhibit many traits which seem to pose a requirement for the methodologies of the behaviorists. Adults need specific and goal-related learning experiences, with stipulated learning objectives in order to capture their time and attention. They would appear to be interested in the teaching of subject-centered materials via the most economic and concise delivery systems.

When engaged in schooling we can detect a heavy investment by adult learners in formal instruction and expository teaching; they feel they are paying for a certain level of expertise. This would lead to an implied emphasis on teaching accountability as well as on an adult's own consciousness of accepting responsibility as a learner. Here we might see the adult begin to "combine" those behavioristic and humanistic elements which most meet the needs of an adult learner. These adults would appear to be more responsive to a logical organization of material; they are, after all, the products of a prior generation with a decisive linear orientation, at least to the present day.

Although the appearance of "freedom" is crucial to self-image, an adult would apparently respond to the careful preparation by a teacher of a coherent lesson plan which exhibits characteristics of closure and is unambiguous. Thus, adult learners are likely to be much more accepting of a systematic methodology, and it can be anticipated that spontaneity and improvisation would be dysfunctional if these methods suggested any sort of "aimlessness."

There is no question that the adult must be intrinsically motivated in order to reinvest in any learning experience, particularly one which is formal in any sense. However, it could be equally well argued that in the majority of instances when adults seek educational attainment the goal of acquiring an extrinsic reward is also just as likely a major motivating force, i.e., gaining career mobility or status enhancements. Further, not only will adults display a clear involvement in specific educational objectives, but they also want some indication that these attainments will have some broad, general outcome effect on their life as individuals. The adult, as a complex human being, is both goal seeking and in need of reinforcement and support. In short, an adult participates in all learning modes as needed.

Institutional Delivery

According to DeCrow, the major adult client pool for an institutional delivery system is the middle classes, especially persons with some level of prior learning experience and strong vocational moti-

vations. The disadvantaged, it is claimed, once past the age of compulsory attendance are less well served by institutional systems of any sort, despite recent efforts to provide many forms of access; the upper classes, as adults, seldom participate in public program offerings but these groups often have elaborate and sophisticated private systems for keeping informed, as do the poor.

Broadly speaking, adults who *can* gain access — and who are motivated to want access — to institutional delivery systems will utilize every available format to achieve their learning goals. For those adults who do become involved with institutionalized learning programs, based on sequential, cumulative, and teacher-related elements, whether for credit or not, DeCrow offers some fundamental statements that almost anyone would employ to explain this aspect of the field:

- Adult education is overwhelmingly vocational in purpose. Its basic aim and appeal to many adult clients is to provide a "second chance" and to remedy those deficiencies in basic or advanced educational areas which impede employment opportunities.
- A second major objective, for adults, is to achieve instrumental and practical "life task" education.
- Many Americans regard learning as intrinsically good. Adult education, in its dependence upon voluntary participation, encourages this view.
- Among supporting agencies for adult education, as well as among the adult clientele, this effort is clearly instrumental, a way of furthering some other mission or goal. Institutional delivery of adult educational experiences has been and continues to be primarily a "means to ends" undertaking.
- Adult learning programs, as formal endeavors, involve every topic, are located everywhere, utilize every means, and are aided by almost every major agency in American life (see appendix).

Self-Initiated Learning

The adult learner, however, cannot be fully or adequately characterized by examining *only* those clients of institutional delivery systems, whether formal or informal, Core or Periphery. These clients are adults who, by virtue of enrollment in some external programatic undertaking, have already selected themselves out of the general learning population. Most of the American population, whatever their age, class, ethnicity, or background, learn *outside* the educational establishments of this country. Here is where the need to distinguish between learning and education becomes crucial to our discussion. Any taxonomy of the learning individual must address the characteristics of the total population, and within that universe education plays a part. The usage of these writers varies widely in discussing noninstitutional learning and education.

Patricia M. Coolican, through her own research and in synthesizing the outcomes of several major recent investigations, achieves a broad view directed toward describing the learning activities of Americans beyond the school-compulsory age. Among her findings:

- Almost every adult undertakes learning as a consciously pursued activity in any given year. For her, "Learning" is a deliberate effort to pursue a skill or a knowledge objective (as contrasted to informal or coincidental socialization, adaptation, or information indexing by persons).
- Most learning activities are initiated for practical reasons related to knowledge and skill needs for job, home, family, or recreation.
- The major planner of adult learning is the learner himself. Self-planned, self-initiated, and self-achieved learning accounts for approximately *two-thirds of the total* learning efforts of adults.
- Group-planned learning activities, whether formal or informal, only account for 10 to 20 percent of the total adult effort in this country.
- Learning for credit constitutes only a *minor* proportion of the educational undertaking and investment of American adults

Most significantly, the adults studied in several of these major investigations were asked to name their *preferred learning environment*. The clear majority (55 percent) named their homes as the site most suitable to their needs; the job locale was a distant second choice (19 percent); and at the low end of the selection of sites only 3.5 percent named "school" as a "most suitable place" for undertaking their learning pursuits (Coolican, 1975).

Thus, we find ourselves with a large universe of adult learners in this country—almost everyone. Of this population, a small proportion have selected to affiliate their learning undertaking with institutional educational offerings. Most adults, however, who regularly and consciously undertake to learn do so individually, autonomously, and idiosyncratically. Our attempts to understand the learning individual in this country must account for this majority despite definitions of adult education which would exclude them.

LEARNING PERFORMANCE

Adding to our analysis of the learning individual, Stanley Grabowski reviews the literature which describes the many past and continuing investigations of adult "learning performance." His discussion is organized around J.W. Getzel's propositions about learning (1956), and he investigates these key topics to discuss learning performance: motivation, capacity, teaching techniques, learning styles, and learning environments. Grabowski uses *learning* in the sense of results, or "performance" as its distinguishing criteria.

Thus, he indicates evidence that the amount of previous education and the recentness of this educational experience has a direct impact

on further successful learning performances. There is conflicting evidence over the role of learning environments and learning locales. Regarding most of the other topic areas, he finds that searching the literature does not produce sufficient enough evaluations to point to any definitive statements.

In addition, many evaluations of adult learning performance have been conducted under laboratory conditions and not in actual classrooms or learning situations; thus, there is some legitimate question of the relationship of these studies to reality. The most obvious outcome of his search, as he suggests, is the real need for significant efforts in evaluation of adult learning based on performance criteria.

Grabowski suggests one area where it is important to recognize the characteristics of the adult learner. Many adults who do enroll in formal, institutionally delivered courses or programs drop out, and they do so for various reasons. Not the least of these reasons is *because they have attained what they came to learn* in respect to performance objectives, and perceive no further need or desire to finish the course (Solomon, et al., 1963, Bosher, 1973).

Differences among teaching techniques have little demonstrable effect on the learning abilities of motivated adults in institutional programs. Variances in gain were slight among various formats, including lecture demonstration, autoinstructional, telelecture, or other forms of programed instruction (cf. Askins, 1967, Blackwood and Trent, 1968, Neale, et al., 1968, Melching and Nelson, 1966). Grabowski mentions that one researcher (Jamieson, 1971) has concluded that age was a more significant variable than the mode of learning, in its effect upon retention; this claim, however, is not borne out by the majority of literature in the field.

Motivation itself is difficult to isolate. The assumed correlation that "good learning equals good motivation" cannot be confirmed because of the inescapable feedback loop effect of learning itself upon motivation maintenance and development (Botwinick, 1967).

Finally, Grabowski's literature search indicates that comparisons of full-time with part-time adult learners in respect to achievement levels have not yet been efficiently evaluated. In fact, both groups, when enrolled in formal higher education, exhibited greater performance levels than did the college-aged students in the same educational settings (Beagle, 1970).

Verner and Davidson (1971) underscore the "one step removed" aspect of assessing learning achievement by stipulating that:

> Learning is a more or less permanent change in behavior that occurs as a result of activity or experience. It is a process that occurs in the mind of the learner and is not itself observable. The *result* of learning *may* be observed. [Emphasis added.]

Among the larger pool of self-initiating learners, Coolican (1975) offers some additional characteristics worth consideration. Previous

assumptions that learning needs and capabilities decline with age will have to be reconciled with recent findings that considerable self-initiated learning is taking place among the elderly (Hiemstra, 1975).

In evaluating factors which do affect the incidence of self-initiated learning, demographics, and previous levels of achievement are significant. Rural populations are most involved in self-initiated learning episodes, followed by urban groups. The fewest numbers appear to be in "small city" areas. The average number of hours spent in self-initiated learning was considerably less among those whose prior education was below grade 12, when compared with those who had completed high school; likewise, lower class and blue-collar populations spent fewer hours per year on learning undertakings than did white-collar classes, and the same differences were perceived when comparing unskilled to skilled and professional groups. Overall, all population subgroupings, regardless of type, engaged in self-initiated learning activities to some extent on a continuing basis.

LIFE STAGES

Until now we have been using the term "adult" as a comprehensive way of distinguishing a large universe of individuals from another universe of children and youth. This level of generalization is no longer useful. Just as we have seen that learning theories are "grossly simplified conceptions of the nature of man and are extremely limited in what they tell us about the human being" (Travers, 1974), so also is the classification of the human population into adults and children a grossly inadequate way of labeling individuals who may differ from one another over spans of development and change which may encompass nearly a century.

Since we have been led to abandon the generic assumption that a single learning theory has to account for the universe of learning behaviors, we have turned our attention upon the learner and upon individual learning characteristics. It becomes necessary, then, to discuss learning as it occurs for individuals at different ages and at different stages throughout the lifespan.

Life stages are crucial to a consideration of learning. Some investigators have put forward the view that different learning theories and models for practice might well be appropriate for differing stages of individual growth and development. Clair Grays argues that the humanistic approach is most suitable to the needs and attitudes of both early adolescence and of the midlife crisis. Other life-stage characteristics might lead the learner to more readily respond to behavioristic techniques. Life stage is not simply a function of age however; some investigators suggest that generation and cohort differences are even more significant than age differences in the development of a concept of life-stage behavior (c.f. Hultsch, in Bortner, 1974).

Thus, our attention is drawn to the view that any discussion of lifelong learning must deal not only with "learning" but also with the notion of "lifelong."

Neugarten (1967) tells us that we must not overlook the development of personality; that is, "the orderly and sequential changes that occur with the passage of time as individuals move from adolescence to adulthood." Her emphasis is on the adult end of the spectrum of development, while noting that there have as yet been no major longitudinal research undertakings on men and women as they move from childhood to youth, from youth into middle age, or from middle age into old age.

Nonetheless, as Neugarten points out, psychologists have thus far been primarily concerned with the first 2 of the 7 decades of life, and the last 50 years of the human organism have been relatively ignored—especially by educators and those involved in articulating learning theory. She goes on to indicate that change during the lifespan is itself a learning experience; that the experiences of parenthood or of career success in middle age are developmental events which influence the personality and exhibit outcomes not unlike those attributed to the completion of a learning episode.

Theorists of development, including learning theorists, who begin by examining childhood find it easy to take growth—biological growth—as their model. Investigators working with this subgroup find it possible to almost take for granted the intimate relationship between physiological and psychological change, and much of this body of theory is based upon the biological clock as its reference. However, if the theorist takes this same point of view in respect to adult development it becomes very difficult, according to Neugarten.

We can stipulate 4 gross age-related lifespan periods: the period from birth through adolescence; the transition from adolescence to young adulthood through, say, the third decade of life; the middle-aged period from, say, 40 to 59; and the old-age period, a long and relatively unexplored range, 60 through age 80 or until death.

Each of these stages is different. Each exhibits a different individual with characteristics, capacities, and need which are changing from day to day. The stages identified are gross in the extreme: We are already conscious of the great range of change which occurs throughout the first stage, that of birth through the adolescent period. It is woth suggesting that the later stages bear an equally intensive examination for change If we are to evolve a concept of learning for the lifespan, we must confront and encompass all of the ages of the human individual.

Supporting Neugarten's emphasis on the need for extensive investigation of the significance of life stage on the learning needs and abilities of adults in particular, Evelyn Duvall (1971) indicates that one of the most important aspects of life stage is the concept of

"family life cycle." Each of at least 4 clearly delineated periods of family life affect individual roles and requirements within our society. Duvall distinguishes (1) the launching of the young as adults, (2) the empty-nest, preretirement period, (3) the early retirement years, and (4) the final phase of life, death of the original husband-wife pair. These are, for Duvall, life-cycle periods which exist as distinct phases of experience and which have yet to receive the attention they require in evaluating learning needs and responses—as compared to the extensive investigations which have already been undertaken on the periods concerned with mate selection, early marriage, and the parenting of young children to adolescence. Even these more widely-studied life-cycle periods have not been adequately correlated with individual learning requirements and responses

Some authorities in adult education do allude to life stages in presenting their views. Kurland and Comly (1975) argue that certain kinds of information should be reserved for later life:

> The maturity of age and direct involvement in life's decisions are preconditions for learning the key skills required by society. It may even be that excessive efforts to "prepare" people while young for roles in society that they will perform when older incapacitates many to perform these roles effectively either because they learn things that must later be unlearned or because, thinking they know all that is necessary to function as adults, they close their minds to further learning.

Although this comment still treats adults as a total class, they go on to refer to Cyril Houle's views on the life cycle. Houle moves us closer to the issues as identified by Neugarten and Duvall by distinguishing certain periods in the lifespan as the "right times" to learn certain things. "Some conception of a life-cycle is essential to anyone who wishes to understand or to practice lifelong education," Houle asserts in "The Changing Goals of Education in the Perspective of Lifelong Learning." He goes on to observe that people will be motivated to study any subject if they know something of its significance and consequence, through personal experience or investment. Thus, he indicates that there is a right time for certain kinds of learning: a time in life to learn how to be a wage earner, a spouse, a parent; right times to lay the foundation for future learning, to learn how to be active in the world of affairs, and a time to learn how to age and to care for one's self as one grows old.

III. The Context for Learning

We have come to a point where it is possible to begin asking some questions about the context for learning both as it currently exists for adults in this country and as it might exist in the future. Up to now we have accomplished, however briefly, an inspection of some prior considerations. We have sketched a profile of the adult learner and offered some definitions of learning. We have presented a general description of contemporary learning theories and matched these views against some major definitions of adult education. Based on such an overview we have discussed adult learning in the context of educational methods, institutional settings, and as a self-initiated activity. Finally, we have refined our use of the term "adult" and broadened the scope of our discussion so that it is, in fact, concerned with learning over the lifespan.

In the course of this undertaking we have uncovered more questions than answers. Vast areas of investigation remain to be developed before definitive statements can be derived from them. We are made painfully aware that before we can move toward the construction of a conceptual framework for lifelong learning we must first attend to "the way things are." This includes an evaluation of the present barriers to adult access to learning, some consideration of what the future may hold in store for our population, and some acknowledgment of issues which arise from speculating about these present and future conditions.

BARRIERS TO LEARNING

Institutional barriers, personal barriers, and social barriers all play a part in constructing obstacles, if not walls, around adult access to the experience of learning. Kurland and Comly (1975) discuss *institutional barriers* confronting most adults. Americans faced with time, job, and home-related constraints also face a planning barrier in

respect to any institutionally delivered educational experience. Most, almost without exception, settle for part-time access. This factor tends to divert their focus from their original learning goals, since first they must seek, uncover, and somehow evaluate those programs which are compatable with their time and geographical constraints. Thus, they must concentrate on means rather than on ends, and hope their actual learning objectives will be met somehow. The search itself is time-consuming, expensive, and often frustrating to the point of debasing the motivation to learn.

Even if adults succeed in their search for a program, once enrolled they can expect little institutional support. Counseling, both before and after admission or enrollment, tends to be minimal and often inappropriate for these nonnormative, older clientele Few teachers, especially in Core institutions, are full-time adult educators; fewer still are trained in the principles of andragogy.

Those institutions within either the Core or the Periphery which realize that the adult client is "different" and which mount efforts to respond to their perception of a significant new market tend to overlook some of these basic barrier issues. Those programs which are devised and developed to lower the hurdles for adult learners find themselves quickly swept up into the same rigidities they set out to alleviate. DeCrow points out that even adult specific programs and providers of educational services hasten to become institutionalized in form and function for the purposes of self-preservation. Funding, budgeting, and staff-loading seem to build bureaucracies directly out of pioneering efforts. Thus, they fall prey to the construction of access gates, and barriers once again arise.

The planning decision made by many institutions that continuing education or other forms of adult service programs must be self-supporting establishes a most significant barrier. It may not only be in conflict with the actual goals of the institutions, such as community colleges, but this policy effectively inhibits all but the middle and upper class clienteles from significant access. Kurland argues that cost-effective education in the public sector services only those who can afford it, not necessarily those who may need it.

The barriers which tend to exclude adults—even those who can afford it—from access to institutions are numerous and significant (Broschart, 1975). Part-time adult students are especially prey to a variety of institutional regulations, such as the strict controls typically exerted over the time and place for registration and the harsh dollar penalties for not meeting these requirements. The difficulties compound in respect to such variables as institutional indifference to part-time student requirements for parking, public transportation, food services, health care, access to libraries and bookstores, or even the simple need for a secure place to hang a coat or hat.

Personal Barriers

Obstacles posed by institutions that offer educational programs and services to the adult learner—whether intentional or simply created through lack of appreciation of the learner's needs—are time, geographic, or economic constraints. Barriers also exist which prevent adult learners from approaching these institutional programs because of personal and self-related obstacles to access. Whether the institution is in the Core or the Periphery, whether its programs are specifically designed for an adult client as the learner, whether it offers all the tangible or intangible support services previously described, the institution is still unable to attract the adult learner who has perceived or has experienced personal barriers in seeking externally delivered educational experience.

Kurland furnishes us with an analysis which pulls together several important studies of the barriers as perceived and experienced by the part-time student who wants to achieve education through institutional delivery systems *Cost* emerges as the primary perceived barrier in all these studies; the test of whether it is a real barrier or only a convenient excuse, as Kurland observes, can best be determined when the cost barrier is raised or lowered in a specific situation. He indicates that an analysis based on actual cost-change experimentation supports that educational cost-levels directly affect participation and access. To the extent that reduced participation represents a loss of opportunity for economic or personal growth and thereby inhibits the development of productive and effective citizens, to that extent the reduction of educational costs for the adult learner becomes significant to social policy. A major problem in pursuing this point, of course, is that most legislators and educators feel that adults should support their education.

Among the more important barriers which might be interpolated from the perceptions of adults is a *lack of counseling services*, whether institutionally based or located elsewhere in the community. Many of the personal obstacles confronting adult learners might be ameliorated by counseling intended to assess their achievements, evaluate their potentialities, and provide career-planning information.

Many adults in our society depend upon their families, friends, neighbors, or even the mass media—especially printed literature such as popular magazines and newspapers—to encourage or inform them. For example, how many thousands of Americans seek medical advice only after reading about situations analogous to their own in the medical question-and-answer columns of newspapers? For many people, career planning and the search for educational services may be an equally haphazard undertaking.

Turning to the larger population of adults who learn outside institutional systems—and we may now have some indicators of why institutional settings represent such a small percentage of actual adult learning activities—we are informed by Coolican that most adults who engage in self-initiated learning do so by willingly and deliberately changing their routines to accommodate learning projects, and give a large share of their "spare" time to these undertakings. The majority of self-initiating adult learners perceive lack of time as the principal barrier to increasing their involvement in learning activities. However, significant *actual*, as compared to perceived, obstacles to self-initiated learning are, in order, lack of education, lack of money, lack of access to resources (other than institutional delivery systems), and lack of motivation (Tennessee, 1974).

An interesting corollary to this list of actual barriers to past learning experiences is found by asking these self-initiating learners what they would perceive as the barriers to undertaking *future* learning projects. Although lack of time remains as the principal perceived barrier, the ranking changes so that lack of money, lack of motivation, and family conflicts follow, with lack of education listed last. Speculation about this reordering of barrier priorities by self-initiating learners moving from past experiences to future expectations might provide avenues for fruitful exploration.

Social Barriers

Social barriers to the pursuit of lifelong learning are both informal and formal. The informal barriers are representative of the attitudes of our society and our institutions toward the adult learner; the formal barriers are a consequence of these attitudes, and represent the lack of legislative support for the learning adult.

Many Americans consider that in most instances the learning adult is someone who "missed his chance" the first time around in his education, and consequently much of adult education is viewed by the society at large as remedial in character. This attitude is reinforced by the majority of professional educators who still persist in the conviction that the American Core educational system represents preparation for life. The notion is imbedded in this society that the individual who has undertaken the primary-secondary experience through high school is certified as a fully competent participant in the worlds of work, family, citizenship, and personal fulfillment. Additionally, the view also persists that postsecondary education results in the development of individuals with higher levels of competency, adaptability, and potential for success (HEW, 1972; Knowles, 1960).

As long as these myths continue to permeate and dominate the American educational establishment as well as the American society,

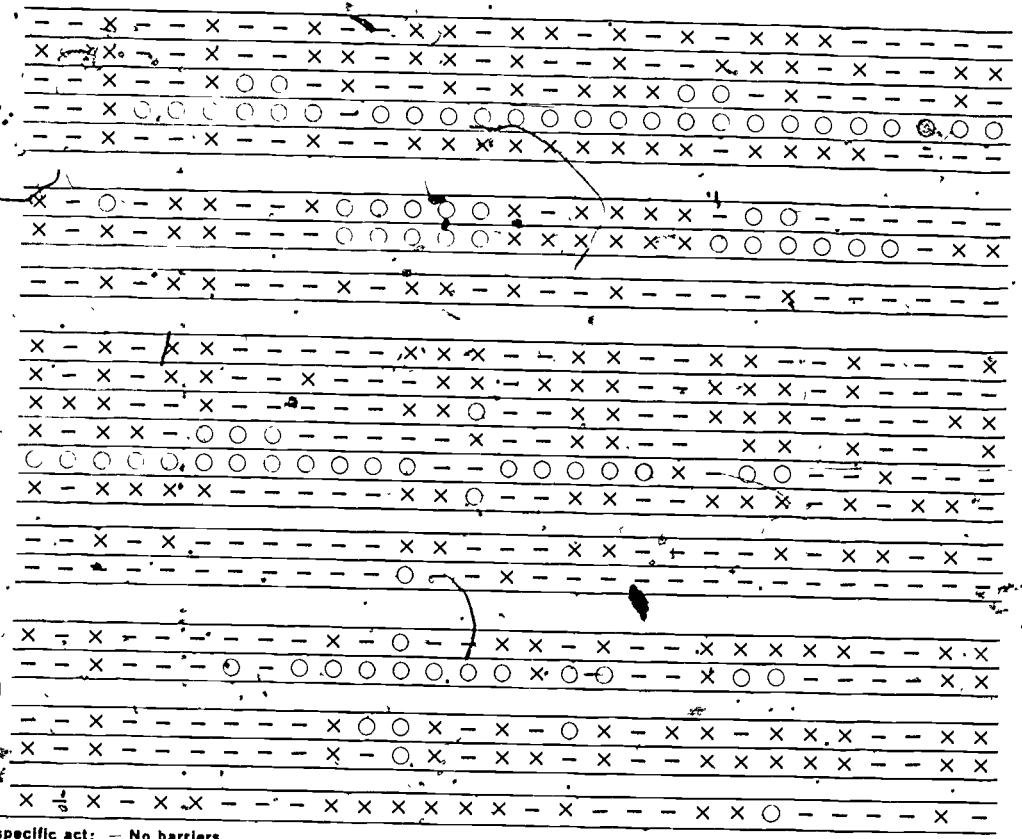
SELECTED FEDERAL LEGISLATION RELATED TO ADULT LEARNING, WITH VARIABLES MARKED, BY ACT, THAT PROMOTE OR HINDER LEARNING OPPORTUNITIES

NAME OF ACT	BARRIERS TO LEARNING																												
	Age	Sex	Maternity/Paternity Benefits	Fees	Direct Aid to Students	Financial Aid Regardless of Income Level	Nontaxable Benefits	Deduction of Benefits if on Welfare	Income Maintenance Discretionary Funds Available	Geographical Requirements	Residential Local Requirements	Provisions for Paid Educational Leave	Released Time From Job	Full-Time Attendance Requirements	Provisions for Child-Care Services	Transportation	Special Services (Tutoring)	Provisions for Bilingual Programs	Placement/Guidance	Counseling	Inadequate Publicity & Promotion of Adult Programs	Categorical Restrictions	Accreditation/Certification	State Planning	Local Planning	Duplicatives of Jurisdictions	Unclear Purposes (Program Provisions)	Inadequate Research	Inadequate Evaluation
Agricultural Extension																													
Cooperative Agricultural Extension	–	–	X	–	X	X	○	○	X	X	–	X	X	–	X	X	X	X	X	X	–	X	–	–	X	–	–	–	X
Rural Development & Small Farm Research & Education	–	–	X	–	X	X	○	○	X	X	–	○	○	○	X	X	X	X	X	–	X	X	X	–	–	–	–	–	–
Comprehensive Employment & Training																													
Title I	X	X	–	–	X	X	–	–	–	X	–	X	X	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–
Title II	X	X	X	–	X	X	–	–	–	X	–	X	X	–	–	–	–	X	–	–	X	–	○	–	–	–	–	X	X
Title III	X	–	–	–	–	X	–	–	–	X	–	X	X	–	–	–	X	–	–	–	–	–	○	–	–	–	–	–	–
Title IV	X	X	–	–	X	X	–	–	–	X	–	X	X	–	–	–	–	–	–	–	–	–	○	–	–	–	–	–	–
Title VI	X	X	X	–	X	X	–	–	–	X	–	X	X	–	X	X	X	X	X	X	–	○	–	–	–	–	–	X	X
Corporation for Public Broadcasting	○	○	–	○	X	○	○	○	X	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	–	○	–
Educational Television	○	○	–	○	X	○	○	○	X	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	–	○	○

See footnote at end of table, p. 27.

SELECTED FEDERAL LEGISLATION RELATED TO ADULT LEARNING, WITH VARIABLES MARKED, BY ACT, THAT PROMOTE OR HINDER LEARNING OPPORTUNITIES—Continued

NAME OF ACT	BARRIERS TO LEARNING																												
	Age	Sex	Maternity/Paternity Benefits	Fees	Direct Aid to Students	Financial Aid Regardless of Income Level	Nontaxable Benefits	Deduction of Benefits if on Welfare	Income Maintenance/Discretionary Funds Available	Geographical Requirements	Residential/Local Requirements	Provisions for Paid Educational Leave	Released Time From Job	Full-Time Attendance Requirements	Provisions for Child-Care Services	Transportation	Special Services (Tutoring)	Provisions for Bilingual Programs	Placement/Guidance	Counseling	Inadequate Publicity & Promotion of Adult Programs	Categorical Restrictions	Accreditation/Certification	State Planning	Local Planning	Duplication of Jurisdictions	Unclear Purposes (Program Provisions)	Inadequate Research	Inadequate Evaluation
Elementary & Secondary Education																													
General	–	○	×	–	×	×	–	–	×	○	○	○	○	○	×	×	×	–	×	–	–	–	×	–	–	–	×	–
Adult Education	×	–	×	–	×	×	–	–	×	–	○	×	×	–	×	×	×	–	×	–	–	–	×	–	–	–	×	–
Community Schools	×	–	×	–	○	×	○	○	×	–	○	○	○	○	×	×	×	×	×	×	–	–	×	–	–	–	×	×
Women's Educational Equity	–	–	×	○	○	○	○	○	○	○	○	○	×	○	×	×	×	×	–	–	–	–	×	×	×	–	–	–
Government Employees Training	–	–	×	–	×	×	○	○	–	–	–	–	×	–	×	–	×	×	×	○	–	–	×	–	–	–	–	×	–
Higher Education																													
Title I	–	–	○	○	×	×	○	○	○	–	–	○	○	–	×	×	×	×	×	×	–	×	–	–	×	–	–	×	–
Title II	–	–	×	–	–	×	–	×	–	–	–	×	×	–	×	–	×	×	×	×	×	×	–	–	×	–	×	–	–
Title IVA	–	–	×	–	–	×	–	×	–	–	×	×	×	–	×	×	–	–	–	–	–	×	–	–	–	×	–	×	–
Title IVB & E	–	–	×	–	–	×	–	–	×	–	–	×	×	–	×	×	×	×	×	×	–	×	–	–	×	–	–	×	–
Title IVC, D, & F	–	–	×	–	–	×	–	–	×	–	–	×	×	×	×	×	–	×	×	–	×	×	–	×	×	–	–	×	–
Title V	–	–	×	–	–	×	–	–	–	–	–	×	×	–	×	×	×	×	–	–	–	×	–	–	×	–	–	–	–
Title X	–	–	×	–	×	×	–	–	–	×	×	×	×	–	×	×	×	×	×	–	–	–	–	–	–	–	–	–	–



[1] × Barriers; ○ Barrier not applicable to specific act; — No barriers.

NOTE.—The 29 variables will be called BARRIERS TO LEARNING in the boxhead.

there will continue to be a major and often impassible barrier to lifelong learning in this country.

The *formal* social barriers follow from the force of this public mood. Legislative entitlement to adult learning in practically every form is, with little exception, developed begrudgingly, by reacting only to critical needs. Hence, it is piecemeal and lacking in coordination, is usually inadequate in meeting the level of problem confronted, and tends to be so short term, need-specific, or underfunded as to be inaccessible to the majority of those who might avail themselves of such social sanction if not social support for learning.

A project group under the direction of Edward Lee Rosenthal (1975) has examined and correlated the multiplicities of Federal level legislation and regulations affecting lifelong learning opportunities. Using as their examination criterion the access of adults to learning opportunities throughout their adult lives, these investigators examined the Federal acts included in the table on page 215. They reviewed these laws to find out if their provisions promoted or hindered learning for adults. They made no attempt to evaluate the effectiveness or quality of individual programs or to investigate the laws' implementation. What is asked, however, if the regulations currently in force do or do not present barriers to achieving a goal of lifelong learning?

To compare the diverse Federal level regulations, these investigators adopted a list of generally recognized obstacles to the achievement of adult learning pursuits, and then measured each piece of legislation against the following list of barriers:

Age
Sex
Maternity/Paternity Benefits
Fees
Direct Aid to Students
Financial Aid Regardless of Income Level
Nontaxable Benefits
Deduction of Benefits if on Welfare
Income Maintenance/Discretionary Funds Available
Geographical Requirements
Residential/Local Requirements
Provisions for Paid Educational Leave
Released Time From Job
Full-Time Attendance Requirements
Provisions for Child-Care Services
Transportation
Special Services (Tutoring)
Provisions for Bilingual Programs
Placement/Guidance
Counseling
Inadequate Publicity and Promotion of Adult Programs
Categorical Restrictions
Accreditation/Certification
State Planning

Local Planning
Duplication of Jurisdictions
Unclear Purposes (Program Provisions)
Inadequate Research
Inadequate Evaluation

Even a cursory inspection of this list shows that most legislative provisions for adult education programs do not include these support services. Yet, the lack of these services represent reasons for adults not gaining access to most of the educational delivery systems purportedly designed for them.

The extremely extensive and ambitious review of Rosenthal and his associates has been condensed. Their 29 variables and a cross-matching of these with a list of selected Federal legislation are shown in the table on pages 25, 26 & 27. As expected, the table shows a low level of significant support for the essential needs to help adults gain realistic access to lifelong learning.

THE DEMOGRAPHICS

The demographics for the year 2000 are already written on the wall; many Americans who will be alive then are alive now. For those yet unborn, several models are available for projection; regardless of which is chosen, some general trends can be supported.

Stanley Moses (1975) reminds us of the anticipated shifts in our national population bulge. Between 1973 and 1983—over the next 10 years—we will witness a 9-percent reduction in the 5- to 13-year-old age group. A massive 17-percent reduction is forecast for the 14- to 17-year-old age group. Thus decimated, the traditional educational Core is left with a large void.

Mathieson (1975) also argues that a plausible set of forecasts for the year 2000 would include these factors:

- The population groupings at the year 2000 will reflect a continuing upward shift of the *median* age.
- Two groups, the 0-14-year olds and 15-29-year olds, will both dwindle in percentage of the total population. The number of youth to age 24 will decline by 15 percent from 1982 and 1990. Thus the Core decline will continue.
- The group aged 25 through 44 will show a massive rate of growth, with around 25 percent increase projected.
- Women will continue to outnumber men in all available projections, the differential being 5 to 55 million, cutting across all racial and ethnic groups.

The population in the year 2000 will be primarily concentrated in the Standard Metropolitan Statistical Areas; however, some trends in *geographical shifts* already are of interest. The population is shifting from the North Eastern States and the North Central States to the South and the West. Some rural States are gaining over industrial

States. Within the west coast area, Southern California is experiencing a net outmigration loss. The shift to rural States is specific at present, to certain nonmetropolitan counties with centers less dense than 50,000.

Since 98 percent of all persons in this country between the ages of 6 to 16 are already enrolled in elementary or secondary schooling, the Core will either dwindle in absolute body count figures or it must expand at either or both ends to encompass enough additional bodies just to stay even at the primary-secondary level, according to Stanley Moses. Core educators are already beginning to eye the preschool population.

Moses goes on to state some alternatives for the Core:

- Since the ratio of high school completions to college matriculations is about 2:1, any increase in high school completions may also increase the level of college-bound.
- The present, collegiate ratio of matriculation to commencement is also around 2.1; any decrease in college-year attritions would also aid in stabilizing the Core.

At best, however, the means—if achieved—can only soften the blow. The Core population will drop by 1985. As a last desperate measure, the least costly, most manageable, and most far-reaching incorporation of population into the Core could occur at the master's degree level. Moses stipulates that such a development, if seized upon by the Core postsecondary establishment, would reflect a decisive tightening of the reins of credentialism upon the labor market.

This is, potentially, a most dangerous barrier to the developing concept of lifelong learning. It will not only postpone the assumption of lifework endeavors by our citizens once again, it will also effectively reassert the control of the Core over our national educational undertaking.

SOME CENTRAL ISSUES

The attempts of those Americans who fell by the educational wayside to get back on the track as productive and achieving human beings may be jeopardized anew. We saw the development of the requirement for high school graduation or equivalency certification for bottom rung labor-market entry; more recently baccalaureate credentials have become the minimum requirement for entry into a multitude of occupations and job titles. This trend has indeed become a significant item on the agenda for our public policy examination.

One question which emerges is that of legitimating the noninstitutional learning activity. Ziegler (1975) asserts that if we wish to expend public funds for adult learning we will be required to provide a rationale which places all these learning activities within a context

of the public interest. Thus, an array of instrumental issues arise. Who decides on the contents, methods, and goals of adult learning? Who decides where, how, and when this effort should occur and/or be serviced? Who decides when adult learning is complete, satisfactory, legitimate, effective? Who should have access to learning, and how should resources be distributed? Ziegler points out that these issues arise only when a question of public policy is involved, otherwise a "market model" can prevail, and everyone is free to do their own thing.

Who will deliver educational services? A situational showdown appears to be shaping up as various sectors eye the future for growth and watch the shifting bulge in the learning force. As Stanley Moses points out, the past decade has marked an intensified competition between the Core and the Periphery. The basic issues of who studies what, where, when, and under whose direction must intensify. The Periphery, as a set of nonrelated but formal delivery systems, has always been designed to relate to new needs and to changing educational patterns and demands. It could well be in a position to respond with vigorous innovations to projected changes.

However, it will find itself in an increased struggle, both internally among its many component parts and externally with the Core, for scarce dollar resources. As a continued oversupply of college graduates creates needs for various training and retraining cycles, jurisdictional disputes between Core and Periphery will intensify and it can be anticipated that battles will be waged over such issues as accreditation, certification, educational continuity, and cost-effectiveness.

What happens to the adult learner in the midst of these organizational struggles? The retreat of the learner into the home, as already demonstrated by Coolican, may not be only a function of choice, it may be a necessity. Carl English, a noted educator of adults in the State of Vermont, asserts that an adult's life revolves primarily around home and work, and that "Home is the only place open twenty-four hours a day." Vermont's 1975 State plan for adult education insisted that, to be effective, somehow adult education must fit into and perhaps even become a part of an adult's "natural" life patterns at home or at work (Vermont, 1975). Adult education that does not fit into this set of already established patterns will always be in competition with some other life requirement imposed upon the adult.

A range of home-based options is suggested. These include home tutors, literacy volunteers, and kitchen classes. The 1975 Vermont plan foresaw correspondence materials, telephone linkages, and limited local media networks interlocking to support these activities, supplemented by drop-in learning centers. (See also, Bobbitt and Paolucci, 1975.)

What sort of learning meets the immediate needs? Literacy is *not* the first priority for most poor, undereducated adults. They have other pressing immediate needs. If one is hungry, sick, or cold, learning to read or write is pretty low on the priority list. Reading, writing, and increased knowledge can produce long-range benefits, but these are hard to perceive when present problems are overwhelming.

One out of five American adults lacks the skills and knowledge needed to function effectively in the basic day-to-day struggle to make a living and to maintain a home and a family. This assertion is based on a 4-year investigation, national in scope, of the competencies of adults to function effectively in the world of today (University of Texas, 1975).

If functional competency is viewed as "the ability to use skills and knowledge needed to meet the requirements of adult living," then it is possible to describe sets of coping skills covering categories which speak to the problems of confronting the real world. These categories are:

- Occupational knowledge
- Consumer economics
- Government and law
- Health care
- Community resources

The 1975 study established a list of 65 objectives centered on the ability to cope, and tested adult proficiency levels against these skills. While the traditional emphasis remains on reading, writing, computation, communication, and problem-solving skills, the shift in focus suggested by this set of investigations is to implement specific learning activities for adults directly related to the life skills required for existing in today's world. What, then, of the world of tomorrow?

THE ULTIMATE BARRIER

Clearly this discussion has demonstrated that, before all others, the ultimate barrier for adults who want to learn is a conceptual one. Most educators tend to mean schooling when they speak of education, and education when they speak of learning. Conversely, most adults seem to actually want the experience of learning when they approach education, and they often discover that access to education means schooling.

Paul Lengrand, a member of the Secretariat of UNESCO in Paris who has written extensively on the problems of adult education, summarizes the resulting dilemma:

> For nine persons out of ten education means school, an activity of a particular nature expressed in terms of curricula, methods, and specialised staff—a world apart which can only be described in an epithet peculiar to itself, "scholastic." School is a

parenthesis in life, with its entrances and exits. On entry the pupil puts on the garb of the schoolboy, to be shed at the time of departure. We can understand why adults hesitate to play this game, and why only the ones who accept are those driven by need or oblication, generally of an economic or professional character

(Lengrand, 1975)

This conceptual barrier is pervasive and primary Perhaps it could be circumvented, if not removed, if we as a profession of educators were to begin to recognize it and deal with it It is not the adult population which is going to reorganize the present situation into some workable conceptual frame

One initial step toward a solution of the conceptual barrier to adult education and lifelong learning might be to identify *and support* at least three classes of adult learners. those who want to be instructed, those who want to become educated, and those who want to learn It is possible to suggest that educators are best at furnishing programs and providers, to some level of formality, for those who want instruction.

Educators are less able to confront the middle group who desire an education. they are apt to think this group needs external control when what these learners most often want is a provision for guidance, access to self-initiated programs, and a method for demonstrating accomplishment if and when they choose to do so. Educators might be able to service this group usefully if they can resist the overwhelming temptation to institutionalize these educational objectives. At least, today, some useful pilot investigations and activities are occurring in this area (c.f Cavert, 1975).

Finally, it is necessary to urge that the last group of would-be learners—probably the largest group in our total population, if we are persuaded by Coolican's synthesis of the most recent data—are people who should be left alone Ninety-nine out of 100 educators are trained to insist upon active intervention to recognize that learning is taking place The thought of adopting a posture of nonaction is most likely unacceptable But careful consideration of this possibility, on the level of public policy, must be a major part of the educator's deliberation.

It is not to be inferred that "leaving people alone to learn" means abandonment Far from it. Facilitation of learning through counseling and guidance, access to resources, and the development of meaningful support mechanisms still exist as requirements for most self-initiated learning. Consequently, these represent barriers that can be removed Community-based public libraries have already seized the initiative in this area (c f Eyster (1973), and "Library Research & Demonstration Program," *FY 75 Abstracts*, September 1975).

What cannot be done, however, is to hide these barriers by erecting more significant hurdles in front of adults by organizing and institutionalizing self-initiated learning. It would then become just another part of the "education business," and the general population would no doubt continue, as they always have, to vote with their feet against it.

What is called for here is recognition and support of certain major undertakings of our total population outside the educational apparatus as it exists today. Learning goes on: it cannot be stopped. It can, however, be thwarted, diverted, or controlled. Educators have these choices. Or they can discover ways to facilitate learning. They can examine methods whereby they might not only get out of the learner's way, but also actually make the learner's path straight and smooth. Such a path does not need hurdles, turn-stiles, or gates; it does not require visas for access, ticket takers, timekeepers, or exit signs to make it into a legitimate passageway through the halls of learning

Stanley Moses reminds us that the universe of learning and educational participation is far broader than anything conceived within the narrow constructs of our present approaches. At times when traditional notions are most susceptible to challenge, the reality of the world serves to shatter rigidities and forces us to plan ways to mend the cracks and gaps thus revealed. Patricia Coolican identifies for us the fundamental issue in determining the future for adult learning in this country by quoting a question asked by Michael Marien:

> Is education to be organized around institutions, credit, and credentials, or is education to be organized around learners in an optimal system for distributing knowledge and encouraging its utilization?

We must regard this not only as our central question but also as our most pressing problem. Can we develop a concept of lifelong learning that will lead us toward a new solution?

IV. Lifelong Learning: A Conceptual Frame

At a meeting of experts in Paris in August 1974, the topic "Basic Cycle of Study" was addressed (UNESCO ED/74, 1974). Although the preoccupation among at least the European participants was in matching education and educational delivery systems to job- and civic-related adult undertakings, the concept of a cycle of study was seen by definition as "a first phase of the educational process in the perspective of life-long education."

The concept was then addressed in the sense of "recurrent education," a usage developed in the European context to denote a multilevel provision of education which may be either terminal at many points for those who leave to enter the world of work and social activity, or preparatory at each stage for those who aspire to further education. This view of multiple levels is intended to contravene the typical system whereby many successive levels of education are formally available, but each with its own objectives and terminus and each with little or no relationship or interface with surrounding levels. Thus, the concept of "cycle of study" is not meant to invoke a total scheme encompassing independent programs and serving discrete populations; rather, it is to be conceived as an educational umbrella for *both* children and adults that gives them access to education at any level for which they are qualified and have determined a need.

This proposal by a UNESCO task group for adopting a view of a basic cycle of study lies at the base of an emerging concept of lifelong learning. The image of a cycle is one that generates an attitude toward learning which spans the entire interval between the cradle and the grave and then repeats: it is an intergenerational ideal, encompassing all ages.

Thus, at the outset, we must declare as invalid any usage of the term "lifelong learning" as a synonym for adult education:

> . . . we by no means identify lifelong education with adult education as, to our regret, is so often done. Why, after all, invent a new name for something already well designated and identified by the term in use? Why add yet another term, albeit with different shades of meaning, to the already lengthy list of expressions such as popular education or culture, mass education, community development, basic education, and so on. There is enough confusion already.
>
> (Lengrand, 1975).

Adult education is unimpaired, however: it simply becomes a part of a larger conceptual frame, together with other aspects of organized education.

> What we mean by lifelong education is a series of very specific ideas, experiments, and achievements, in other words, education in the full sense of the word, including as its aspects and dimensions, its uninterrupted development from the first moments of life to the very last, and the very close, organic interrelationship between the various points and successive phases in its development.
>
> (Lengrand, ibidem.)

This broad inclusion of all aspects of organized and institutional educational endeavors is further broadened by also enveloping all of the informal modes of education. John Gardner speaks to this view of education which goes beyond any formal system by asserting that the ultimate educational goal is to shift the responsibility for the pursuit of learning to the individual. He notes that we have "an odd conviction that education is what goes on in school buildings and nowhere else. Not only does education continue when schooling ends . . . it in fact incorporates the world and life itself." (Gardner, 1963.)

Another UNESCO working paper, "The Content of Education in the Context of Life-Long Education," develops this ideal at length. It is worth quoting the whole of its argument:

> The concept of life-long education has its origins in the distant past, and features in the works of a large number of philosophers and educators, but in its recent form it stems from the practice of adult education and from the ideas to which this has given rise; it is therefore bound up with the desire to meet the growing demand for education which is characteristic or our age and with a movement in favour of democratization which entails not only general access to education but also equality of opportunity, to be achieved through education which is adapted to the aspirations, the characteristics, and the needs of the different age groups and the various socio-economic and occupational categories. The "life-long education" approach is also associated with the fact, which has already been referred to, that as school systems, for obvious reasons of finance, cannot meet the whole

of the demand for education, it is essential to deploy all the educational resources of society to this end.

Added to this is the fact, firstly, that in a society dominated by the abundance and variety of communication media and messages, it is plain that knowledge, values, attitudes and skills are increasingly being acquired and moulded outside school. Secondly, just as education is not mediated solely by the scholastic institution, it is also not restricted in time to the period of full-time schooling but, on the contrary, extends over the entire span of human life and is thus, in temporal terms, a continuing process as well as being in social and spatial terms, a global process.

The increase in the volume of knowledge and the increasingly rapid obsolescence of what is learnt make it impossible to restrict learning to the period of schooling, and compel the individual to supplement and renew his knowledge throughout his life, both as regards general education and as regards professional qualifications. This implies a far-reaching change in the goals and modalities of the educational process; education ceases to be identified with a particular period of life which differs from subsequent phases, and is no longer even regarded as a preparation for life: education and life are intimately bound up with one another.

(¶9 and ¶10, in UNESCO, "Working Paper," 1975)

We see the concept of lifelong learning taking form from these several contributions. It becomes even clearer when we examine the summary prepared by R.H. Dave (1973) which he developed on the basis of examining extant literature on lifelong learning. From a multitude of sources, Dave traces those common themes which cumulate significantly enough through the literature to represent consensus:

- Learning does not start at the beginning of formal schooling and is not completed at its finish, but is a lifelong process.
- Lifelong learning is not restricted to bridging education, recurrent education, or adult education. It encompasses all forms of organized education.
- Lifelong learning includes both formal and informal educational models, both planned learning and coincidental learning.
- The home plays a decisive but elusive part in starting and continuing the process of lifelong learning.
- The community also has an important role in lifelong learning from the moment when the child and the community start to influence each other.
- Educational institutions such as schools, the university and other educational centers are naturally of great importance for lifelong learning, but only as one part of the factors that influence it.
- In contrast to the forms of education that lead to a selection of an elite, lifelong learning encompasses all categories and represents a democratization of education.

- Lifelong learning is characterized by flexibility and an abundance of content, study materials, study techniques, and learning occasions.
- Lifelong learning should be included in every stage of a person's life, so that maturity and a feeling of self-realization is achieved for this stage and so that the individual prepares for the next stage in order to improve the quality of his personal, social, and professional life.
- Lifelong learning should function as an effective tool for change. It should lead to an improvement of the conditions of life and the quality of life and should stimulate the individual into an active commitment and participation.
- The implications of the term "quality of life" depends on the society's system of values. It depends among other things on the political system, social traditions, economic conditions, and the general feeling of what a "good life" represents. The ultimate goal for lifelong learning is to uphold and improve the quality of life.

We are indebted to R.H. Dave for drawing together the various threads which have been running throughout our analysis of the implications of lifelong learning. We began by examining a view of the cycle of education; we can now see that the means for relating this cycle to the world at large is to place it within that world rather than segregating it as a "non-worldly" institutionalized experience. We are called upon to relate school to out-of-school and community experiences, to establish a two-way relationship between education and society, and to root this relationship deeply within the social, cultural, and physical environment of the individual, child and adult, throughout all of the stages of the lifespan.

The main and overriding aim of this concept is to enable each person to "take charge" of his or her life. Our objectives thus include the development of individual potential, social participation, citizenship, and an investment in continued lifelong educational undertakings. The achievement of these objectives should underlie any scheme for the implementation of a concept of lifelong learning.

The implications for any such implementation are, of course, profound:

> ...it should be noted in this connection that the philosophy of education which is here offered as a framework for the discussion necessarily implies a renovation of the structures of education systems—and this is something which UNESCO is endeavoring to promote. Indeed, in order to satisfy the demand for education made by the various groups (in society), it is necessary to set up and assemble complete, flexible, and diversified educational structures which mobilize all the formal and informal educational resources of the community and together form a coherent system affording continuity both vertically and horizontally.

(UNESCO "Working Paper . . ." 1975)

The UNESCO position points the way toward a learning society wherein all of the areas of educational organization and activity are coordinated, interactive, and open. They are permeable and linked to life itself.

The principle that education, in John Gardner's words, is "the world and life itself" is a noble one, more easily acknowledged than applied. It may well be virtually impossible to implement in the face of established educational organizations as they now exist.

The one sector most susceptible to change, it would seem, is education for adults. This vague domain has not yet become as rigidly organized or heavily institutionalized as have other sectors. It is in grave danger of becoming so. However, we still have an opportunity to develop policies for adult education which will be deliberately transitional, opening the way toward lifelong learning.

This is an intriguing notion. We could "rear-load" the present front-loaded system with a new concept for lifelong learning upon which we could base present and future planning for adult education. If this movement were to gather strength and constituents it might be able to tip the balance toward a need for rethinking and perhaps even remodeling, if not reconstruction, of the present educational edifice.

The argument comes down to this, then: adult education, because of its very lack of consolidation and definiteness, offers us an ideal opportunity to transform it into a means to a further end, that of lifelong learning. It is a beguiling prospect, if we can divest ourselves of our current preoccupation with "professionalizing" the education of adults in order to legitimate this endeavor as a "field."

> The real educational innovations of our time have been introduced in this field of adult education. It was here that group work replaced the exclusive use of formal lectures, lessons, and exercises. Adult education, except where it is only a substitute for and a complement to school education, shuns the idea of marks, positions, punishments and rewards and all that clutter from a bygone age which our schools still harbour. Education shows through here in its true light as a process of exchange and dialogue in which each participates and contributes according to what he is and to his specific acquirements and talents, not according to set patterns. There is no selection, which is a brutal and wasteful process, nor are there any examinations and certificates which distort the teaching process and impair the normal development of the personality through fear of failure . . . In a word, adult education, at least wherever it is given its head and does not have alien patterns imposed on it for professional, political, or partisan reasons, is education in freedom, for freedom, and by freedom.
>
> (Lengrand, 1975)

Can we not give some thought to this exhortation?

Bibliography

The following documents furnished the original input for preparation of "A Synthesis of Selected Manuscripts About the Education of Adults in the United States." Unless otherwise noted, all manuscripts were developed under contract for the Bureau of Occupational and Adult Education and are unpublished.

Each writer, in turn, offers a bibliography. Of these sources, some have been cited in this publication and are incorporated into the list of "Secondary Sources." These secondary citations do not, of course, exhaust the original bibliographies of the primary manuscripts; full bibliographies for each of the major study documents are available upon request.

MANUSCRIPTS USED AS PRIMARY SOURCES

Fred L. Baldwin, "Resources, the Environment, and the Future of Adult Education." Educational Policy Research Center, Syracuse University, 1975.

Patricia M. Coolican, "Self-Planned Learning: Implications for the Future of Adult Education." An addendum to the 1974 paper. The University of West Virginia, 1975.

Roger DeCrow, "Programs and Providers of Adult Education: A National Overview." Written on behalf of the Adult Education Association of the U.S.A., 1975.

Jill H. Ellsworth, "Notes on the Adequacy of Local Delivery Systems."

———. "Dollar Value of Female Household Work 1972 and 2000."

———. "Self-Planned Learning—Total Hours Expended."

———. "Literacy and Adult Learning Needs."

———. "Current Trends in the Retraining/Reentry of Women Into the Labor Force." EPRC, Syracuse University, 1975.

Stanley M. Grabowski, "Evaluation of Results of Adult Learning." Newton Centre, Mass., 1975.

John J. Hudder, "The Allocation of Time and Its Implications for Adult Participation in Learning Activities." EPRC, Syracuse University, 1975.

Norman D. Kurland and Lucy T. Comly, "Major Problems in Adult Education." Albany, New York State Education Department, 1975.

David E Mathieson, "Some American Demographic Projections 1975-2000."
———, "Changing Attitudes Towards American Education."
———. "The Pay-off in Adult Basic Education 1965-74" EPRC, Syracuse University, 1975.
Stanley Moses, "The Learning Force. 1975." New York, Hunter College, 1975
Edward Lee Rosenthal, et al, "Legislation and Regulation Affecting Lifelong Learning" School of Education, Harvard University, 1975
Peter B. White, "Implications of Communications Technology for Adult Education" EPRC, Syracuse University, 1975
Warren I. Ziegler. "Central Issues in the Lifelong Learning Concept" EPRC, Syracuse University, 1975

SECONDARY SOURCES

In addition to the aforementioned manuscripts, it was necessary to investigate additional sources of information as well as offering selected citations from the original documents to substantiate certain areas of information.

Billy Earl Askins. "The Effectiveness of Two Different Uses of an Auto-Instructional Program To Teach the Use of the Air Force Fiscal Account Structure and Codes" Unpublished Doctoral Dissertation, North Texas State University, 1967 198 pp
Albert Bandora. *Principles of Behavior Modification* New York Holt, Rinehart, and Winston, 1969
R G. Barker. *Ecological Psychology. Concepts and Methods for Studying the Environment of Human Behavior*, Stanford, Calif Stanford University Press, 1968
Peggy Beagle. "Factors Affecting Academic Achievement of Adult Students Enrolled in Ontario University Credit Courses" Unpublished (Master's) Dissertation, Lakehead University, Ontario, Canada, 1970 81 pp
Helen Blackwood and Curtis Trent, "A Comparison of the Effectiveness of Face-to-Face and Remote Teaching in Communicating Educational Information to Adults" Manhattan, Kans Kansas State University, October 1968 16 pp
Norma Bobbitt and Beatrice Paolucci, *Home as a Learning Center* East Lansing, Mich Michigan State University, 1975
Rayman W Bortner, Samuel S Dubin, David F Huetsch, John Whithall, Editors, *Adults As Learners—Proceedings of a Conference* University Park, Pa Pennsylvania State University, 1974
Roger Boshier, "Educational Participation and Dropout A Theoretical Model" *Adult Education*, Vol 23, No 4, 1973 Pp 255-282
Jack Botwinick, *Cognitive Processes in Maturity and Old Age* New York Springer Publishing Co, 1967
James R Broschart, "Barriers to Adult Learners in Higher Education" Unpublished Essays Boston College, 1974 24 pp
Edmund deS Brunner, et al, *An Overview of Adult Education Research* Washington D C Adult Education Association, 1959
R V Buckley and H M Walker, *Modifying Classroom Behavior* Champaign, Ill Research Press, 1970
P Cavanagh and O Jones, "An Evaluation of the Contribution of a Program of Self-Instruction to Management Training" *Programmed Learning and Educational Technology* Vol 5, No 4, 1968 Pp 294-300
C Edward Cavert, ed, *Designing Diversity '75 Conference Proceedings, Second National Conference on Open Learning and Nontraditional Study* Lincoln, Nebr, University of Mid-America, 1975
Arthur W Combs, et al *The Professional Education of Teachers* Boston Allyn and Bacon, 1974 (2d ed)

H. P. Dachler and W. H. Mobley, "Construct Validation of an Expectancy-Instrumentality-Task Goal Model of Work Motivation. Some Theoretical Boundary Conditions." *Journal of Applied Psychology*, 58; 1973. Pp. 397-418

R. H. Dave, *Lifelong Education and School Curriculum*. London. 1973.

Department of Education and Science, England and Wales, *Education: A Framework for Expansion*. London: 1969.

Francis J DiVesta, "Information Processing in Adult Learners" W. Bortner, et al, ed., *Adults As Learners*. University Park, Pa Pennsylvania State University, 1974. Pp. 81-104.

S. S. Dubin and M Okun, "Implications of Learning Theories for Adult Instruction." *Adult Education*, Vol. 24, No 1, Fall 1973. Pp. 3-19

Evelyn Millis Duvall, "Aging Family Members' Roles and Relationships" Paper presented at White House Conference on Aging, Dec 1, 1971

———, *Family Development* Philadelphia J B Lippincott, 1971 (4th ed)

George W Eyster, *Interrelating of Library and Basic Education Services for Disadvantaged Adults: A Demonstration of Four Working Models* Morehead, Ky., Appalachian Adult Education Center, 1973. Annual Report, Vol. I.

C B Ferster, "Individualized Instruction in a Large Introductory Psychology Course." *The Psychological Record*, Vol. 18, 1968. Pp 521-532.

Festinger, Caren, and Rivers, "The Effect of Attention on Brightness Contrast and Assimilation." *Amer. Jour of Psych* 83, 2 (June 1970), 189-207

Funk & Wagnalls Standard College Dictionary New York Funk & Wagnalls, 1968

John W Gardner, *Excellence Can We Be Equal and Excellent Too?* New York Harper & Row, 1961

J W Getzels, *Learning Theory and Classroom Practice in Adult Education* Syracuse: University College, Syracuse University, 1956

M Guttentag, "Subjectivity and Its Use in Evaluation Research" *Evaluation*, Vol. 1, No 2, 1973. Pp. 60-65

D O. Hebb· Pribram, Hebb, & Macdonald, "The Ghost in the Machine" *Psychological Scene*, Vol. 2 (September 1968), 28-43

T. Hickey and J J Spinetta, "Bridging Research and Application" *Gerontologist*, 1974.

Roger Hiemstra, *The Older Adult and Learning* Lincoln, Nebr., University of Nebraska, Department of Adult and Continuing Education, September 1975

Ernest R. Hilgard, *Theories of Learning* New York Appleton-Century-Crofts, 1956 (2d ed)

Cyril Houle, "The Changing Goals of Education in the Perspective of Lifelong Learning."

David F. Hultsch, *in* Bortner, et al (eds), *Adults as Learners—Proceedings of a Conference* University Park, Pa Pennsylvania State University, 1974.

J. M. Hunt, "Intelligence and Experience" 1961

G. H Jamieson, "Learning and Retention A Comparison Between Programmed and Discovery Learning at Two Age Levels." *Programmed Learning Educational Technology*, Vol 8, No 1, January 1971 Pp 3-70

John W C Johnstone and Ramon J Rivera, *Volunteers for Learning*. Aldine Publishing Co., 1965.

Malcolm S Knowles, *Higher Adult Education in the United States*. Washington, D.C· American Council on Education, 1969

Paul Lengrand, *An Introduction to Lifelong Education* Paris UNESCO Press, 1975; also London· Croom Helm, 1975

Library Research & Demonstration Program, "FY 75 Abstracts" Washington, D.C U.S. Office of Education, September 1975

A. A. Liveright and N Haygood (eds.), *The Exeter Papers*: Boston 1969.

D Barry Lumsden and Ronald H Sherron, *Experimental Studies in Adult Learning and Memory*. Washington, D C.· Hemisphere Publishing Corp , 1975

Michael Marien, "Beyond the Carnegie Commission" Syracuse Educational Policy Research Center, Syracuse University, 1972

Abraham H Maslow, *Motivation and Personality* New York Harper & Row, 1970 (2d ed.)

———, *Toward a Psychology of Being* New York, Van Nostrand, 1962

William H Melching and Frank B Nelson, "The Influence of Practice Frames and Verbal Ability on Programmed Instruction Performances" Washington, D C HumRRo, U S Department of the Army, January 1966 24 pp

J G Nealls, et al, "Adult Training The Use of Programmed Instruction" *Occupational Psychology*, Vol. 42, No 1, 1968 Pp 23-31

Bernice L Neugarten, "The Developmental Processes of the Adult" Address - Unpublished Manuscript Bank Street College of Education, Jan 9, 1967

Organization for Economic Co-operation & Development, "Framework for Comprehensive Policies for Adult Education," by The Education Committee Paris 14 November 1975, *ED (75) 10*, 1st rev RESTRICTED

Carl Rogers, *Freedom to Learn* Columbus, Ohio Charles E Merrill, 1969

B Rosenshine and W Furst, "The Use of Direct Observation to Study Teaching" Ch 5 in R M W Travers (ed), *Second Handbook of Research on Teaching* Chicago Rand McNally, 1973

Melvin L Silberman, et al (eds), *The Psychology of Open Teaching and Learning* Boston Little, Brown, 1972

B F Skinner, *Beyond Freedom and Dignity*, New York Alfred A Knopf, 1971

———, "The Technology of Teaching" New York Appleton-Century-Crofts, 1968

Daniel Solomon, William E Bezdek, and Larry Rosenberg, *Teaching Styles and Learning* Chicago Center for the Study of Liberal Education for Adults, 1963

W R Torbert, *Learning from Experience* New York Columbia University Press, 1972

Alan Tough, "The Adult's Learning Projects A Fresh Approach to Theory and Practice in Adult Learning" Toronto Ontario Institute for Studies in Education, 1973 (Research in Education Series, No 1)

Robert M W Travers, "Conference Synthesis Remarks," Conference on Adults as Learners, held at the Pennsylvania State University in May 1974, as published in Bortner, et al (eds), *Adults As Learners* University Park, Pa Pennsylvania State University, 1974

UNESCO, Development of Adult Education" Paris 26 August 1975, FD/MD/37

——— "ISCED Handbook United Kingdom (England and Wales)" Paris UNESCO Office of Statistics, December 1975 CSR E 12

———, "Meeting of Experts on the Basic Cycle of Study" Paris UNESCO House, August 1974 FD-74 Conf 622 5

———, "Working Paper, Meeting of Experts on the Content of Education in the Context of Life-long Education" Paris 8 September 1975 Distribution Limited, Orig French

University of Tennessee Department of Continuing and Higher Education, "Adult Learning Projects A Study of Adult Learning in Urban and Rural Tennessee" Knoxville, Tenn University of Tennessee, 1974

University of Texas at Austin, Division of Extension, "Adult Functional Competency "A Summary" Austin, Tex University of Texas, March 1975 n p

Vermont State Department of Adult Education, "Vermont Adult Education State Plan, 1976" Montpelier, Vt *Adult Education Report*, Vol 11, No 1, April 1975

Coolie Verner and Catherine V Davidson, *Physiological Factors in Adult Learning and Instruction* Tallahassee Florida State University, 1971

Appendix: The State of the Art

This section outlines an overview of adult learning as it is expressed by the writers whose studies have been examined. This abstract was developed from the descriptions of current practices by Roger DeCrow, Stanley Moses, Kurland and Comly, and David Mathieson, together with other relevant information from the entire set of documents.

I Program Domains (definitions and descriptions of areas of adult education)
- A Basic and Secondary
  - 1 Adult Basic Education attempts to support achievement of functional literacy, with primary target on those with less than grade 8 attainment
  - 2 Movement toward programs based upon coping needs of daily life
- B Occupational and Vocational Training
  - 1 By far the most extensive, both in population served and in variety of services
  - 2 Employers in community tend to form close and symbiotic relationships with voc-tech training, trade schools, and vocational programs both at secondary and postsecondary levels
- C Higher Adult Education
  - 1 University extension, evening colleges, and community colleges use customary criterion of appropriateness serious and sustained learning with appropriately required faculty or services of higher education.
  - 2 May be either degree or nondegree in orientation, usually approached by adults on part-time basis
- D Continuing Education for Professions and Management
  - 1 Advent of formal requirements for continuing professional certifications lead to both Core and Periphery program implementation
  - 2 Growth of State and/or professional association's control and accreditation
- E Labor Education
  - 1 No counterpart to liberal education of working classes as in Great Britain or Scandinavia
  - 2 American trade unions sponsor and provide programs focused on leadership training Worker access to education subject of contract negotiation
- F Community and Social Action
  - 1 Educational undertakings oriented around issues or personal pursuits
  - 2 Tend to be ad hoc, informal, discontinuous

II. Major Providers (ranked in order of magnitude of estimated users)
- A. Mass Media
  1. Foremost both in role as formal educational tool and as unintentional agent for socialization.
  2. Lack of definitive and broad evaluative studies of impact, effectiveness
- B. Employers and Work Settings
  1. Military most sophisticated educational delivery system in the country, with supporting research and development unknown/unused elsewhere
  2. Major industries and corporations conduct programs as a function of employment, includes on-the-job-training and formal programs, using in-house personnel as teachers and trainers
  3. Although data is unreliable, best guess estimates indicate that of 600 largest corporations, 61 to 88 percent offer educational programs
- C. Proprietary Schools
  1. Both onsite and correspondence techniques, highly developed over long history, provides occupational and personal development training
  2. Best estimates indicate this sector's full-time equivalent enrollment (FTE) may total more than the number of public and private secondary and post-secondary adult students
- D. Higher Education
  1. Traditional formal role as educator for adults in degree programs
  2. Trend of opening up facilities and services to community needs
- E. Cooperative and Extension Services
  1. Historically allied and developed from land-grant institutions and U S Department of Agriculture
  2. Base in communities and populations served, program planning works from grass roots up with wide citizen participation in operations
  3. Today in urban and suburban locales as well as rural, no longer exclusively 4-H and agricultural/homemaker oriented
  4. Ability to mobilize massive voluntary efforts with minimum full-time staffs
- F. Public Schools
  1. Some direct access programs using school sites, either conducted by school organization and personnel or used by other providers
  2. Trend for use as community resource center, including programs for elderly and retired
  3. Often overlooked as adult contact with school vicariously through children
- G. Other Agencies as Providers of Adult Learning Experiences
  1. Community services, including libraries, museums, park and recreation centers
  2. Churches and religious organizations are deeply involved in community services and action programs, trends include development as community centers with range from child care to elderly care, most with educational components
  3. Specialized providers include health and welfare agencies, American Red Cross, YWCA and YMCA, philanthropic agencies, associations for the elderly, and fraternal or interest-oriented groups such as Rotary and the like
  4. American life is leavened by voluntary associations, political parties, clubs, and special interest groups, most turn to educational pursuits

III. The Learning Force
- A. Core and Periphery
  1. Core of primary, secondary, and postsecondary formal educational undertakings which limit access to those with prior Core-gained credentials, basic primary-secondary level is compulsory in this country to age 16, and public sector version is "free"

2 Periphery of formal institutional educational delivery systems, including public, private, and proprietary, no coordination, multiple aims, programs, objectives, client pools, with access available to most without prior credentials but many programs are costly.

3 Considered together, Core and Periphery population involvement exceeds those in the labor force, thus, education is one of the central industries of society today

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